REMARKS/ARGUMENTS

This amendment and response is filed in reference to the non-final Office Action (hereinafter "Office Action") mailed March 18, 2009. In that Office Action, claims 1, 2, 9-10, 12, 21-27, 30-33, and 42-50 were examined and all claims were rejected. Specifically, claims 1, 2, 10, 12, 21-23, 26-27, and 30-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Achenson et al.* (U.S. Patent No. 6,477,586; hereinafter "Achenson") in view of *Link et al.* (U.S. Patent No. 6,012,096; hereinafter "Link"). Applicants respectfully note that the patent number listed for Link in the Office Action was incorrect. Applicants have verified with Examiner Swearingen that the correct patent number for Link is U.S. Pat. No. 6,012,096. Claims 9 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Achenson in view of Link and further in view of *Bradley et al.* (U.S. Patent No. 7,082,463; hereinafter "Bradley"). Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Achenson in view of Link and further in view of *Lowery et al.* (U.S. Patent No. 7,454,457; hereinafter "Lowery"). Finally, claims 42-50 were rejected under 35 U.S.C. § 101 as allegedly drawn to non-statutory subject matter.

Reconsideration of the objections and rejections, as they might apply to the original and amended claims in view of these remarks, is respectfully requested. In this Amendment, claims 1, 12, 21, 23-25, 30-32, and 42-50 have been amended, claims 11, 22, 28-29, and 34-41 have been canceled, and claims 51-53 have been added. Therefore, claims 1-2, 9-10, 12, 21, 23-27, 30-33, and 42-53 are present for examination.

Applicants submit that amendments are supported throughout the specification, and in the claims as originally filed, and do not introduce new matter. For instance, support may be found in at least the following sections of the Specification:

(1) Remote procedure calls (RPCs) are an example of a communications protocol. By utilizing remote procedure calls a program on one computer may execute a program on a server computer. A system developer may not need to develop specific procedures for the server: the client program sends a message to the server with appropriate arguments and the server returns a message containing the results of the program executed. (Specification, at 2, para. [0004].)

(2) In an embodiment of the invention, a client may be configured to refrain from sending the performance data alone. Instead, the client may store the performance data until, for example, a subsequent request/response cycle is initiated with the server. The client may incorporate the stored performance data into the subsequent request, thereby potentially reducing some of the overhead associated with sending the client-perceived performance data to the server. (Specification, at 21, para. [0054].)

(3) The performance data 712 provides particular information from the client's perspective regarding the performance of the system, for example, request/response latency, request/response error codes and/or the frequency of error codes. (Specification, at 21-22, para. [0056].)

(4) Examples of the server's performance data preferences include: whether and under what conditions the client 802 should send performance data, whether the client 802 should send performance data related to communications with servers other than the server 804 and if so what types of servers, and how long to store performance data before it becomes too old to be of interest. (Specification, at 24, para. [0061].)

(5) In an embodiment of the invention, the messaging server 902, 904, or 906 returns a performance data enable flag to the messaging client 908 indicating whether or not the server 902, 904, or 906 wants to receive the client monitoring (i.e., performance) data. (Specification, at 27, para. [0068].)

Claim Rejections – 35 U.S.C. § 101

Claims 42-50 were rejected under 35 U.S.C. § 101 as allegedly drawn to non-statutory subject matter. Applicants respectfully traverse the rejection, but in the interest of furthering prosecution of the present application, claims 42-50 have been amended to recite: "A computer system, comprising: a processor, wherein the processor processes instructions for reporting performance data as perceived by a client in a client server network; and a computer storage medium having stored thereon the instructions for reporting performance data, the stored instructions comprising a data structure." As such, the data structure is processed by a tangible processor to yield a tangible result, *i.e.,* "reporting performance data as perceived by a client in a client server network." In light of this amendment, Applicants respectfully request that Examiner withdraw the rejection and allow claims 42-50.

Claim Rejections – 35 U.S.C. § 103 – Achenson and Link

Claims 1, 2, 10, 12, 21-23, 26-27, and 30-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Achenson in view of Link. Applicants respectfully traverse the § 103(a) rejections because either the Examiner failed to state a *prima facie* case of obviousness or the current amendments to the claims now render the Examiner's arguments moot. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the references must teach or suggest all of the claimed limitations to one of ordinary skill in the art at the time the invention was made. M.P.E.P §§ 2142, 2143.03; *In re Royka*, 490 F.2d 981, 985 (C.C.P.A. 1974); *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970). Specifically, Achenson fails to teach or suggest all of the claimed limitations and Link fails to compensate for the deficiencies of Achenson.

Achenson discloses a multi-threaded, multiple process distributed system including remote procedure call (RPC) messages. (Achenson, Abstract.) Specifically, Achenson discloses a plurality of processes, "each . . . comprising a plurality of threads and a means for receiving, composing, and forwarding remote procedure call messages." (*Id.*, col. 2, ll. 17-19.) Achenson discloses a Process 1 which originates a RPC request message. (*Id.*, col. 4, ll. 50-58.) The request message is then forwarded by intermediate processes until it reaches a Process N, which responds to the RPC message. (*Id.*) The response initiated by Process N is then forwarded through multiple processes back to Process 1, which initiated the RPC request. (*Id.*, ll. 59-65.) Achenson's distributed system may further be implemented using a TCP/IP protocol. (*Id.*, col. 1, ll. 34-36.)

In contrast, the present application provides methods and systems for efficiently transmitting client-generated performance information to a server in one or more remote procedure calls (RPCs) between the client and the server. More specifically, as recited in claim 1, the client first "detect[s] that a server is enabled to receive the performance information." The performance information "comprises at least one of: a request/response latency, a request/response error code, and a request/response error code frequency." The client also "dispatch[s] performance context information . . . to the server, wherein the performance context information comprises one or more of: a client computer system host name, a client user name, a

client network adaptor name, a client network adaptor speed, and a client network protocol address." The client then "dispatch[es] a first request . . . to the server, wherein the first request specifies a first remote procedure call (RPC)." The "first RPC comprises at least one argument for executing a program on the server."

Claim 1 further recites that in response to the first request, the client "receiv[es] a first response from the server, wherein the first response corresponds to a result of the first RPC." The client then "measur[es] a time delay from the client's dispatch of the first request to the client's receipt of the first response from the server." The "time delay is a number of milliseconds between sending the first request and receiving the first response [and] . . . is a request/response latency of the first request." The client "stor[es] the first request/response latency . . . *until a second request specifying a second RPC is generated by the client*" (emphasis added). The client then "append[s] the first request/response latency *to a header* of the second request from the client to the server [wherein] . . . the *second request specif[ies] the second RPC . . . different from the first RPC*" (emphasis added). Unlike Achenson, the present methods utilize *the header of an RPC* transmitted by the client to the server *to pass performance information*. Thus, the present methods provide the advantages of "client side monitoring of client server communications" and the *efficiency* of passing the performance information by "appending it to at least one subsequent RPC." (Specification, at 4, para. [0009].) Additionally, there is no mention in Achenson of "*detecting that a server is enabled to receive the performance information*" and "*dispatching performance context information* from the client to the server."

As such, Achenson fails to teach or disclose, *inter alia*, "*detecting that a server is enabled to receive the performance information*, wherein the performance information comprises at least one of: a request/response latency, a request/response error code, and a request/response error code frequency," "*dispatching performance context information* from the client to the server, wherein the performance context information comprises one or more of: a client computer system host name, a client user name, a client network adaptor name, a client network adaptor speed, and a client network protocol address," "in response to the received first response,

measuring a time delay from the client's dispatch of the first request to the client's receipt of the first response from the server . . . wherein the time delay is a request/response latency of the first request," "storing the first request/response latency at the client *until a second request specifying a second RPC is generated by the client*," and "*appending the first request/response latency to a header of the second request* from the client to the server . . . wherein the second request specifies the second RPC, and wherein the second RPC is different from the first RPC," as recited in claim 1 (emphasis added).

Link fails to compensate for the deficiencies of Achenson. Link discloses a "method and system for determining network latency between clients in a computer network." (Link, Abstract.) More specifically, Link discloses an embodiment wherein "[o]ne client (e.g., the local client) sends an initial ping packet to another (e.g., a remote) client . . . [t]he initial ping packet includ[ing] the local client's time stamp." (*Id.*, ll. 17-20.) Thereafter, "[w]hen the remote client receives the initial packet . . . the remote client *(essentially immediately) responds* with a response packet, wherein the response packet includes the remote client's current timestamp along with the other timestamp, which is left intact." (*Id.*, ll. 20-25; emphasis added.) When the local client "receives the response at some later time . . . the local client is able to determine the latency based on the new current (now later) time minus the earlier time saved in the local machine's timestamp." (*Id.*, ll. 25-29.) The "*local client also responds* with a response-response packet to return the timestamp of the remote client to the remote client . . . [and the] remote client is then able to calculate the latency from its current time minus the time in its saved timestamp." (*Id.*, ll. 29-33; emphasis added.) Finally, the local client "may also include the result of its latency calculation in the response-response packet, whereby the remote machine may average the two measured latencies for a better time estimate." (*Id.*, ll. 34-37.)

In contrast, the present claims recite "*detecting that a server is enabled to receive the performance information*" and "*dispatching performance context information* from the client to the server." The present claims also recite that performance information "comprises at least one of: a request/response latency, *a request/response error code, and a request/response error code frequency*" (emphasis added). Unlike Link, the present methods *utilize the header of an RPC*

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transmitted by the client to the server to pass performance information. Thus, the present methods provide the advantages of "client side monitoring of client server communications" and the *efficiency* of passing the performance information by "appending it to at least one subsequent RPC." (Specification, at 4, para. [0009].)

In sum, Link fails to disclose, *inter alia, "detecting that a server is enabled to receive the performance information,* wherein the performance information comprises at least one of: a request/response latency, a request/response error code, and a request/response error code frequency," *"dispatching performance context information* from the client to the server, wherein the performance context information comprises one or more of: a client computer system host name, a client user name, a client network adaptor name, a client network adaptor speed, and a client network protocol address," "dispatching a first request from the client to the server, *wherein the first request specifies a first remote procedure call (RPC),* and wherein the first RPC comprises at least one argument for executing a program on the server," "storing the first request/response latency at the client *until a second request specifying a second RPC is generated by the client,"* and "appending the first request/response latency to a header of the second request from the client to the server . . . *the second request specifying the second RPC . . .* different from the first RPC," as recited in claim 1 (emphasis added). As such, claim 1 is allowable over the references of record.

For at least the same reasons, independent claims 12, 30, and 32 are also allowable over the cited references. Independent claim 12 recites, *inter alia, "detecting that a server is enabled to receive performance data,* wherein the performance data comprises at least one of: a request/response latency, a request/response error code, and a request/response error code frequency," *"sending performance context information* from a client to the server, wherein the performance context information comprises one or more of: a client computer system host name, a client user name, a client network adaptor name, a client network adaptor speed, and a client network protocol address," "sending a first request from the client to the server, *wherein the first request specifies a first remote procedure call (RPC), and wherein the first RPC comprises at least one argument for executing a program on the server,"* "calculating a first request/response

latency comprising a difference between the response received time for the first response and the request initiation time for the first request," "storing the first request/response latency at the client *until a second request specifying a second RPC is generated by the client*," and "sending a second request from the client to the server, the second request comprising: *a header comprising the first request/response latency*; and the second RPC, wherein the second RPC is different from the first RPC, and *wherein the second RPC comprises at least one argument for executing a program on the server*" (emphasis added). As such, Applicants respectfully request that the Examiner issue an allowance for claim 12, and its dependent claims 21, 23, and 26-27, at the Examiner's earliest convenience.

Independent claim 30 recites, *inter alia, "detecting that a first server is enabled to receive performance data*, wherein the performance data comprises at least one of: a request/response latency, a request/response error code, and a request/response error code frequency," "*sending performance context information* from a client to the first server, wherein the performance context information comprises one or more of: a client computer system host name, a client user name, a client network adaptor name, a client network adaptor speed, and a client network protocol address," "*calculating a request/response latency* for the first request/response pair," "storing the request/response latency for the first request/response pair at the client *until a second request specifying a second RPC is generated* by the client," and "sending a second request from the client to a second server, the second request comprising: *a header comprising the request/response latency* for the first request/response pair; and the second RPC, wherein the second RPC is different from the first RPC" (emphasis added). As such, Applicants respectfully request that the Examiner issue an allowance for claim 30, and its dependent claim 31, at the Examiner's earliest convenience.

Independent claim 32 recites, *inter alia, "detecting that a server is enabled to receive performance data*, wherein the performance data comprises at least one of: a request/response latency, a request/response error code, and a request/response error code frequency," "*calculating a request/response latency* for the first request/response pair comprising a difference between the response received time for the first response and the request initiation

time for the first request," "sending a second request from the client to the server, wherein *the second request specifies the second RPC, and wherein the second RPC is different from the first RPC*," and "when a difference between a request initiation time for the second request and the performance data storage time associated with the first request/response pair *is less than a maximum performance data age threshold*, incorporating the performance data associated with the first request/response pair *into a header of the second request*" (emphasis added). As such, Applicants respectfully request that the Examiner issue an allowance for claim 32 at the Examiner's earliest convenience.

Claim Rejections – 35 U.S.C. § 103 – Achenson, Link and Bradley

Claims 9 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Achenson in view of Link and further in view of Bradley. Applicants respectfully traverse the § 103(a) rejections because either the Examiner failed to state a *prima facie* case of obviousness or the current amendments to the claims now render the Examiner's arguments moot. Specifically, Achenson fails to teach or suggest all of the claimed limitations and Link and Bradley fail to compensate for the deficiencies of Achenson.

Bradley discloses a "Time-Based Service Monitoring mechanism for monitoring Service Level Agreements (SLAs) over specific time intervals." (Bradley, Abstract.) Bradley further discloses emailing results of the SLA monitoring to a customer. (*Id.*, col. 9, ll. 19-20.) More specifically, Bradley discloses that "an SLA may guarantee that a customer will incure a maximum message latency of 200 milliseconds (ms) between devices A and B." (*Id.*, col. 4, ll. 28-30.) However, "a maximum message latency" is not equivalent to the "maximum performance data age threshold," as recited in claim 33 and in new claims 51-53. The Abstract notes that "performance data is stored on the client until transmitted *or until it has aged beyond a server specified maximum age*." The maximum performance data age threshold specifies the time that performance data should be stored. Beyond that period, the client will not send the data to the server.

Regarding claim 9, Bradley fails to make up for the deficiencies of Achenson and Link and claim 9 is allowable for at least the same reasons as claim 1. As such, Applicants respectfully request that the Examiner issue an allowance for claim 9 at the Examiner's earliest convenience.

Regarding claim 33, Bradley fails to make up for the deficiencies of Achenson and Link and claim 9 is allowable for at least the same reasons as claim 32. As such, Applicants respectfully request that the Examiner issue an allowance for claim 33, as well as new claims 51-53, at the Examiner's earliest convenience.

Claim Rejections – 35 U.S.C. § 103 – Achenson, Link and Lowery

Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Achenson in view of Link and further in view of Lowery. Applicants respectfully traverse the § 103(a) rejections because either the Examiner failed to state a *prima facie* case of obviousness or the current amendments to the claims now render the Examiner's arguments moot. Specifically, Achenson fails to teach or suggest all of the claimed limitations and Link and Lowery fail to compensate for the deficiencies of Achenson.

Lowery discloses methods and systems for receiving content from a data center. (Lowery, Abstract.) More specifically, Lowery discloses that a GUID may be inserted into the request for content. (*Id.*, cols. 17:7-32; 18:40-60.) However, Lowery fails to make up for the deficiencies of Achenson and Link, and claims 24 and 25 are allowable for at least the same reasons as claim 12 from which they depend. As such, Applicants respectfully request that the Examiner issue an allowance for claims 24 and 25 at the Examiner's earliest convenience.

CONCLUSION

This Amendment fully responds to the Office Action mailed on March 18, 2009. Still, that Office Action may contain arguments and rejections that are not directly addressed by this Amendment due to the fact that they were rendered moot in light of the preceding arguments in favor of patentability. Hence, the failure of this Amendment to directly address an argument raised in the Office Action should not be taken as an indication that the Applicants believe the argument has merit. Furthermore, the claims of the present application may contain other elements, not discussed in this Amendment, which are not shown, taught, or otherwise suggested by the art of record. Accordingly, the preceding arguments in favor of patentability are advanced without prejudice to other bases of patentability.

It is believed that no further fees are due with this Response. However, the Commissioner is hereby authorized to charge any deficiencies or credit any overpayment with respect to this patent application to deposit account number 13-2725.
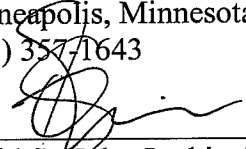
In light of the above remarks and amendments, it is believed that claims 1-2, 9-10, 12, 21, 23-27, 30-33, and 42-53 are now in condition for allowance, and Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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